

# CRF Errors Corrected by the STIC Systems Branch

O/PE 0260

Serial Number: 09/441,857

CRF Processing Date: 12/9/99  
 Edited by: ME  
 Verified by: ME (STIC staff)

- ENTERED
- ✓
- ☐ Changed a file from non-ASCII to ASCII
  - ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
  - ☐ Edited a format error in the Current Application Data section, specifically: \_\_\_\_\_
  - ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other \_\_\_\_\_.
  - ☐ Added the mandatory heading and subheadings for "Current Application Data".
  - ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
  - ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: \_\_\_\_\_
  - ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: \_\_\_\_\_
  - ☒ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: 25
  - ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
  - ☐ Inserted colons after headings/subheadings. Headings edited included: \_\_\_\_\_
  - ☐ Deleted extra, invalid, headings used by an applicant, specifically: \_\_\_\_\_
  - ☐ Deleted: ☐ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as \_\_\_\_\_.
  - ☐ Inserted mandatory headings, specifically: \_\_\_\_\_
  - ☐ Corrected an obvious error in the response, specifically: \_\_\_\_\_
  - ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
  - ☐ Corrected an error in the Number of Sequences field, specifically: \_\_\_\_\_
  - ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
  - ☐ Deleted **ending** stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: \_\_\_\_\_
  - ☐ Other: \_\_\_\_\_

\*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form. 3/1/95

Input Set: I441857.RAW

This Raw Listing contains the General Information  
Section and up to first 5 pages.

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1  <110> APPLICANT: Duffy, Hao-Peng Xu
2      Shan, Ji-dong
3      Yuan, Li-ming
4      Dudman, Daniel
5      Calabro, Anthony
6  <120> TITLE OF INVENTION: Identification of Differentially Methylated
7      Multiple Drug Resistance Loci
8  <130> FILE REFERENCE: 52494/2202
9  <140> CURRENT APPLICATION NUMBER: US/09/441,857
10 <141> CURRENT FILING DATE: 1999-11-18
11 <150> EARLIER APPLICATION NUMBER: US 60/108,994
12 <151> EARLIER FILING DATE: 1998-11-08
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33 <212> TYPE: DNA
34 <213> ORGANISM: Artificial Sequence
35 <220> FEATURE:
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Input Set: I441857.RAW

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73                                     1
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75     Gly Gly Asp Phe Gly Asn Pro Leu Arg Lys Phe Lys Leu Val Phe Leu
76         5             10             15
77     ggg gag caa agc gtt gca aag aca tct ttg atc acc aga ttc agg tat      152
78     Gly Glu Gln Ser Val Ala Lys Thr Ser Leu Ile Thr Arg Phe Arg Tyr
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80     gac agt ttt gac aac acc tat cag gca ata att ggc att gac ttt tta      200
81     Asp Ser Phe Asp Asn Thr Tyr Gln Ala Ile Ile Gly Ile Asp Phe Leu
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83     tca aaa act atg tac ttg gag gat gga aca atc ggg ctt cgg ctg tgg      248
84     Ser Lys Thr Met Tyr Leu Glu Asp Gly Thr Ile Gly Leu Arg Leu Trp
85             55             60             65
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87     Asp Thr Ala Gly Gln Glu Arg Leu Arg Ser Leu Ile Pro Arg Tyr Ile
88             70             75             80
89     cgt gat tct gct gca gct gta gta gtt tac gat atc aca aat gtt aac      344
90     Arg Asp Ser Ala Ala Ala Val Val Val Tyr Asp Ile Thr Asn Val Asn
91             85             90             95
92     tca ttc cag caa act aca aag tgg att gat gat gtc aga aca gaa aga      392
93     Ser Phe Gln Gln Thr Thr Lys Trp Ile Asp Asp Val Arg Thr Glu Arg
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# RAW SEQUENCE LISTING PATENT APPLICATION US/09/441,857

DATE: 12/10/1999  
TIME: 10:09:05

Input Set: I441857.RAW

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98      gac aag agg caa gtg tca gtt gag gag gga gag agg aaa gcc aaa ggg      488
99      Asp Lys Arg Gln Val Ser Val Glu Glu Gly Glu Arg Lys Ala Lys Gly
100             135                      140                      145
101     ctg aat gtt acg ttt att gaa act agg gca aaa act gga tac aat gta      536
102     Leu Asn Val Thr Phe Ile Glu Thr Arg Ala Lys Thr Gly Tyr Asn Val
103             150                      155                      160
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129     <222> LOCATION: 48..809
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133                                     1
134     ggc gga gac ttc ggg aat ccg ctg agg aaa ttc aag ctg gtg ttc ctg      104
135     Gly Gly Asp Phe Gly Asn Pro Leu Arg Lys Phe Lys Leu Val Phe Leu
136             5                      10                      15
137     ggg gag caa agc gtt gca aag aca tct ttg atc acc aga ttc agg tat      152
138     Gly Glu Gln Ser Val Ala Lys Thr Ser Leu Ile Thr Arg Phe Arg Tyr
139             20                      25                      30                      35
140     gac agt ttt gac aac acc tat cag gca ata att ggc att gac ttt tta      200
141     Asp Ser Phe Asp Asn Thr Tyr Gln Ala Ile Ile Gly Ile Asp Phe Leu
142             40                      45                      50
143     tca aaa act atg tac ttg gag gat gga aca atc ggg ctt cgg ctg tgg      248
144     Ser Lys Thr Met Tyr Leu Glu Asp Gly Thr Ile Gly Leu Arg Leu Trp

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# RAW SEQUENCE LISTING PATENT APPLICATION US/09/441,857

DATE: 12/10/1999  
TIME: 10:09:05

Input Set: I441857.RAW

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148		70		75		80		
149	cgt gat tct gct gca gct gta gta gtt tac gat atc aca aat gtt aac							344
150	Arg Asp Ser Ala Ala Ala Val Val Val Tyr Asp Ile Thr Asn Val Asn							
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153	Ser Phe Gln Gln Thr Thr Lys Trp Ile Asp Asp Val Arg Thr Glu Arg							
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155	gga agt gat gtt atc atc acg cta gta gga aat aga aca gat ctt gct							440
156	Gly Ser Asp Val Ile Ile Thr Leu Val Gly Asn Arg Thr Asp Leu Ala							
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158	gac aag agg caa gtg tca gtt gag gag gga gag agg aaa gcc aaa ggg							488
159	Asp Lys Arg Gln Val Ser Val Glu Glu Gly Glu Arg Lys Ala Lys Gly							
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161	ctg aat gtt acg ttt att gaa act agg gca aaa act gga tac aat gta							536
162	Leu Asn Val Thr Phe Ile Glu Thr Arg Ala Lys Thr Gly Tyr Asn Val							
163		150		155		160		
164	aag cag ctc ttt cga cgt gta gca gca gct ttg ccg gga atg gaa agc							584
165	Lys Gln Leu Phe Arg Arg Val Ala Ala Ala Leu Pro Gly Met Glu Ser							
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167	aca cag gac gga agc aga gaa gac atg agt gac ata aaa ctg gaa aag							632
168	Thr Gln Asp Gly Ser Arg Glu Asp Met Ser Asp Ile Lys Leu Glu Lys							
169		180		185		190		195
170	cct cag gag caa aca gtc agc gaa ggg ggt tgt tcc tgc tac tct ccc							680
171	Pro Gln Glu Gln Thr Val Ser Glu Gly Gly Cys Ser Cys Tyr Ser Pro							
172		200		205		210		
173	atg tca tct tca acc ctt cct cag aag ccc cct tac tct ttc att gac							728
174	Met Ser Ser Ser Thr Leu Pro Gln Lys Pro Pro Tyr Ser Phe Ile Asp							
175		215		220		225		
176	tgc agt gtg aat att ggc ttg aac ctt ttc cct tca tta ata acg ttt							776
177	Cys Ser Val Asn Ile Gly Leu Asn Leu Phe Pro Ser Leu Ile Thr Phe							
178		230		235		240		
179	tgc aat tca tca ttg ctg cct gtc tcg tgg aga tgatctatta gcttgacaag							829
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193		1		5		10		15
194	gtg ttc ctg ggg gag caa agc gtt gca aag aca tct ttg atc acc aga							96

# RAW SEQUENCE LISTING PATENT APPLICATION US/09/441,857

DATE: 12/10/1999  
TIME: 10:09:05

Input Set: I441857.RAW

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201	Asp Phe Leu Ser Lys Thr Met Tyr Leu Glu Asp Gly Thr Ile Gly Leu	
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204	Arg Leu Trp Asp Thr Ala Gly Gln Glu Arg Leu Arg Ser Leu Ile Pro	
205	65 70 75 80	
206	agg tac atc cgt gat tct gct gca gct gta gta gtt tac gat atc aca	288
207	Arg Tyr Ile Arg Asp Ser Ala Ala Ala Val Val Val Tyr Asp Ile Thr	
208	85 90 95	
209	aat gtt aac tca ttc cag caa act aca aag tgg att gat gat gtc aga	336
210	Asn Val Asn Ser Phe Gln Gln Thr Thr Lys Trp Ile Asp Asp Val Arg	
211	100 105 110	
212	aca gaa aga gga agt gat gtt atc atc acg cta gta gga aat aga aca	384
213	Thr Glu Arg Gly Ser Asp Val Ile Ile Thr Leu Val Gly Asn Arg Thr	
214	115 120 125	
215	gat ctt gct gac aag agg caa gtg tca gtt gag gag gga gag agg aaa	432
216	Asp Leu Ala Asp Lys Arg Gln Val Ser Val Glu Glu Gly Glu Arg Lys	
217	130 135 140	
218	gcc aaa ggg ctg aat gtt acg ttt att gaa act agg gca aaa act gga	480
219	Ala Lys Gly Leu Asn Val Thr Phe Ile Glu Thr Arg Ala Lys Thr Gly	
220	145 150 155 160	
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222	Tyr Asn Val Lys Gln Leu Phe Arg Arg Val Ala Ala Ala Leu Pro Gly	
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224	atg gaa agc aca cag gac gga agc aga gaa gac atg agt gac ata aaa	576
225	Met Glu Ser Thr Gln Asp Gly Ser Arg Glu Asp Met Ser Asp Ile Lys	
226	180 185 190	
227	ctg gaa aag cct cag gag caa aca gtc agc gaa ggg ggt tgt tcc tgc	624
228	Leu Glu Lys Pro Gln Glu Gln Thr Val Ser Glu Gly Gly Cys Ser Cys	
229	195 200 205	
230	tac tct ccc atg tca tct tca acc ctt cct cag aag ccc cct tac tct	672
231	Tyr Ser Pro Met Ser Ser Ser Thr Leu Pro Gln Lys Pro Pro Tyr Ser	
232	210 215 220	
233	ttc att gac tgc agt gtg aat att ggc ttg aac ctt ttc cct tca tta	720
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235	225 230 235 240	
236	ata acg ttt tgc aat tca tca ttg ctg cct gtc tcg tgg aga	762
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242	<213> ORGANISM: Homo sapiens	
243	<400> SEQUENCE: 12	
244	Met Ser Ala Gly Gly Asp Phe Gly Asn Pro Leu Arg Lys Phe Lys Leu	

PAGE: 6

VERIFICATION SUMMARY  
PATENT APPLICATION US/09/441,857

DATE: 12/10/1999  
TIME: 10:09:05

Input Set: I441857.RAW

Line ? Error/Warning

Original Text

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Input Set: I441857.RAW

## PREVIOUSLY ERRORED SEQUENCES-EDITED

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4  <213> Homo sapiens
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6  <221> CDS
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8  <220>
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16      gcaggggccc agagagctcg gtgcccgcct ttcgctcgc ctttttcgtc agctggctgg      360
17      agcagcatcg gtccgggagg tctctaggct gaggcggcgg ccgctcctct agttccaca      419
18      atg tcc acg ggc gga gac ttc ggg aat ccg ctg agg aaa ttc aag ctg      467
19      Met Ser Thr Gly Gly Asp Phe Gly Asn Pro Leu Arg Lys Phe Lys Leu
20      1          5          10          15
21      gtg ttc ctg ggg gag caa agc gtt gga aag aca tct ttg atc acc aga      515
22      Val Phe Leu Gly Glu Gln Ser Val Gly Lys Thr Ser Leu Ile Thr Arg
23      20          25          30
24      ttc atg tat gac agt ttt gac aac acc tat cag gca aca att ggc att      563
25      Phe Met Tyr Asp Ser Phe Asp Asn Thr Tyr Gln Ala Thr Ile Gly Ile
26      35          40          45
27      gac ttt tta tca aaa act atg tac ttg gag gat cga aca atc agg ctt      611
28      Asp Phe Leu Ser Lys Thr Met Tyr Leu Glu Asp Arg Thr Ile Arg Leu
29      50          55          60
30      cag ctg tgg gat act gcg ggt cag gaa cgt ttc cgt agc ctc att ccc      659
31      Gln Leu Trp Asp Thr Ala Gly Gln Glu Arg Phe Arg Ser Leu Ile Pro
32      65          70          75          80
33      agt tac atc cgt gat tct gct gca gct gta gta gtt tac gat atc aca      707
34      Ser Tyr Ile Arg Asp Ser Ala Ala Ala Val Val Val Tyr Asp Ile Thr
35      85          90          95
36      aat gtt aac tca ttc cag caa act aca aag tgg att gat gat gtc aga      755
37      Asn Val Asn Ser Phe Gln Gln Thr Thr Lys Trp Ile Asp Asp Val Arg
38      100          105          110
39      aca gaa aga gga agt gat gtt atc atc atg cta gta gga aat aaa aca      803
40      Thr Glu Arg Gly Ser Asp Val Ile Ile Met Leu Val Gly Asn Lys Thr
41      115          120          125
42      gat ctt gct gac aag agg caa gtg tca att gag gag gga gag agg aaa      851
43      Asp Leu Ala Asp Lys Arg Gln Val Ser Ile Glu Glu Gly Glu Arg Lys
44      130          135          140
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47      145          150          155          160

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RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/441,857DATE: 12/10/1999  
TIME: 10:09:05

Input Set: I441857.RAW

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54	ctg gaa aag cct cag gag caa cca gtc agt gaa gga ggc tgt tcc tgc	1043
55	Leu Glu Lys Pro Gln Glu Gln Pro Val Ser Glu Gly Gly Cys Ser Cys	
56	195 200 205	
57	taatctccca tgtcatcttc aaccttcttc agaagctcac tgctttggcc cccttactct	1103
58	ttcattgact gcagtgtgaa tattggcttg aaccttttcc cttcagtaat aacgtattgc	1163
59	aattcatcat tgctgcctgt ctctgggaga tgatctatta gcttcacaag cacaacaaaa	1223
60	gtcagtgctc tcattattta tattttacaa aaagccaaaa tatttcagca tattccagtg	1283
61	ataactttaaa aaattagata cattttctta acattttttt cttttttaat gttatgataa	1343
62	tgtacttcaa aatgatggaa atctcaacag tatgagtatg gcttgggttaa cgagcggtat	1403
63	gttcacagcc tactttatct ctcttgctt ttctcacctc tcacttaccg ggaattc	1460

PAGE: 1

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/441,857

DATE: 12/09/1999  
TIME: 15:11:06

Input Set: I441857.RAW

This Raw Listing contains the General  
Information Section and those Sequences  
containing ERRORS.

Does Not Comply  
Corrected Diskette Needed

1 <110> Duffy, Hao-Peng Xu  
2 Shan, Ji-dong  
3 Yuan, Li-ming  
4 Dudman, Daniel  
5 Calabro, Anthony  
6 <120> Identification of Differentially Methylated  
7 Multiple Drug Resistance Loci  
8 <130> 52494/2202  
9 <140> US/09/441,857  
10 <141> 1999-11-18  
11 <150> US 60/108,994  
12 <151> 1998-11-08  
13 <160> 46  
14 <170> WordPerfect 8.0 for Windows

ERRORED SEQUENCES FOLLOW

15 <210> 25  
16 <211> 1460  
17 <212> DNA  
18 <213> Homo sapiens  
19 <220>  
20 <221> CDS  
21 <222> 420..1043  
22 <220>  
23 <223> cDNA (composite of multiple cDNA clones)  
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27 agggaacggc cctagctttg ggaagccaga ggacaccctt ggctcctgcc gacaccgcc 180  
28 tccttccctt ccagcccgcg ggcctcgctc ggtgctaggc tactctgccg ggaggcggcg 240  
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30 gcagggggccg agagagctcg gtgcccggcc ttccgctcgc ctttttcgtc agctggctgg 360  
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33 Met Ser Thr Gly Gly Asp Phe Gly Asn Pro Leu Arg Lys Phe Lys Leu  
34 1 5 10 15  
35 gtg ttc ctg ggg gag caa agc gtt gga aag aca tct ttg atc acc aga 515  
36 Val Phe Leu Gly Glu Gln Ser Val Gly Lys Thr Ser Leu Ile Thr Arg  
37 20 25 30  
38 ttc atg tat gac agt ttt gac aac acc tat cag gca aca att ggc att 563  
39 Phe Met Tyr Asp Ser Phe Asp Asn Thr Tyr Gln Ala Thr Ile Gly Ile

PAGE: 2

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/441,857

DATE: 12/09/1999  
TIME: 15:11:06

Input Set: I441857.RAW

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43		50				55		60
44	cag	ctg	tgg	gat	act	gcg	ggt	cag
45	Gln	Leu	Trp	Asp	Thr	Ala	Gly	Gln
46		65				70		75
47	agt	tac	atc	cgt	gat	tct	gct	gca
48	Ser	Tyr	Ile	Arg	Asp	Ser	Ala	Ala
49				85				90
50	aat	ggt	aac	tca	ttc	cag	caa	act
51	Asn	Val	Asn	Ser	Phe	Gln	Gln	Thr
52			100					105
53	aca	gaa	aga	gga	agt	gat	ggt	atc
54	Thr	Glu	Arg	Gly	Ser	Asp	Val	Ile
55			115					120
56	gat	ctt	gct	gac	aag	agg	caa	gtg
57	Asp	Leu	Ala	Asp	Lys	Arg	Gln	Val
58			130					135
59	gcc	aaa	gag	ctg	aat	ggt	atg	ttt
60	Ala	Lys	Glu	Leu	Asn	Val	Met	Phe
61			145					150
62	tac	aat	gta	aag	cag	ctc	ttt	cga
63	Tyr	Asn	Val	Lys	Gln	Leu	Phe	Arg
64				165				170
65	atg	gaa	agc	aca	cag	gac	aga	agc
66	Met	Glu	Ser	Thr	Gln	Asp	Arg	Ser
67			180					185
68	ctg	gaa	aag	cct	cag	gag	caa	cca
69	Leu	Glu	Lys	Pro	Gln	Glu	Gln	Pro
70			195					200
71	taatctcca	tgatcatcttc	aaccttcttc	agaagctcac	tgctttggcc	cccttactct		1103
72	ttcattgact	gcagtgtgaa	tattggcttg	aaccttttcc	cttcagtaat	aacgtattgc		1163
73	aattcatcat	tgctgcctgt	ctcgtggaga	tgatctatta	gcttcacaag	cacaacaaaa		1223
74	gtcagtgtct	tcattattta	tattttacaa	aaagccaaaa	tatttcagca	tattccagt		1283
E--> 75	ataactttaa	aaattagata	cattttctta	acattttttt	cttttttaat	gttatgataa		1243 1343
76	tgtacttcaa	aatgatggaa	atctcaacag	tatgagtatg	gcttggttaa	cgagcggat		1403
77	gttcacagcc	tactttatct	ctccttgctt	ttctcacctc	tcacttacc	ggaattc		1460

p>E: 3

VERIFICATION SUMMARY  
PATENT APPLICATION US/09/441,857

DATE: 12/09/1999  
TIME: 15:11:06

Input Set: I441857.RAW

Line ? Error/Warning

Original Text

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75 E Number of Bases conflict w/ Running Total ataactttaa aaattagata cattttctta acattttt